

## ABSTRACT

**CONNECTIONLESS BROADCAST SIGNALLING**

5        A communications system comprises a beacon and at least one portable device for receiving data from the beacon. The beacon broadcasts messages using a first protocol which provides a series of inquiry messages which hop frequencies (such as Bluetooth). Additional data is broadcast using a spread spectrum transmission technique. These two modes enable the  
10      spread spectrum transmission technique to be used to enable an unsynchronised receiver to establish communication in a short time, so that data can be sent to the receiver as quickly as possible. The frequency hopping technique may require a longer call set-up procedure, but provides a more appropriate communications protocol for bi-directional transfer of larger  
15      quantities of data.

[Fig. 1]